RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/579.662
Source:	I.FWP
Date Processed by STIC:	5/30/06
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ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial	Number: 10/579, 662	CRF Edit Date: 5/30/0 Edited by:
	Realigned nucleic acid/amino acid numbers/text text "wrapped" to the next line	in cases where the sequence
	Corrected the SEQ ID NO. Sequence numbers of	edited were:
	Inserted or corrected a nucleic number at the en NO's edited:	d of a nucleic line. SEQ ID
	Deleted: invalid beginning/end-of-file text;	page numbers
<i>.</i>	Inserted mandatory headings/numeric identifier	s, specifically:
	Moved responses to same line as heading/numer	ic identifier, specifically:
\int	Other: Corrected <1417 line	

Revised 09/09/2003



IFWP

RAW SEQUENCE LISTING DATE: 05/30/2006
PATENT APPLICATION: US/10/579,662 TIME: 16:07:42

Input Set : A:\PTO.AMC.txt

```
3 <110> APPLICANT: ELENA FEINSTEIN et al.
      5 <120> TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF KIDNEY FIBROSIS AND OTHER
FIBROTIC
              DISEASE
      6
      8 <130> FILE REFERENCE: 71541-A-PCT-US; 133/PCT1-US1
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/579,662
C--> 11 <141> CURRENT FILING DATE: 2006-05-17
    13 <150> PRIOR APPLICATION NUMBER: 60/520,935
    14 <151> PRIOR FILING DATE: 2003-11-17
    16 <150> PRIOR APPLICATION NUMBER: PCT/IL 2004/001049
    17 <151> PRIOR FILING DATE: 2004-11-16
    19 <160> NUMBER OF SEQ ID NOS: 8
    21 <170> SOFTWARE: PatentIn version 3.2
    23 <210> SEQ ID NO: 1
    24 <211> LENGTH: 3225
    25 <212> TYPE: DNA
    26 <213> ORGANISM: Homo sapiens
    29 <220> FEATURE:
    30 <221> NAME/KEY: CDS
    31 <222> LOCATION: (1)..(3225)
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                                            10
                                                                               96
    38 att gct gct gac atg agt aat atc ata gaa aat ctg gac acg cgg gaa
    39 Ile Ala Ala Asp Met Ser Asn Ile Ile Glu Asn Leu Asp Thr Arg Glu
    42 ctc cac ttt gag gga gag gag gta gac tac gac gtg tct ccc agc gat
                                                                              144
    43 Leu His Phe Glu Gly Glu Glu Val Asp Tyr Asp Val Ser Pro Ser Asp
    44
                                    40
                                                                              192
    46 ccc aag ata caa gaa gtg tat atc cct ttc tct gct att tat aac act
    47 Pro Lys Ile Gln Glu Val Tyr Ile Pro Phe Ser Ala Ile Tyr Asn Thr
                                55
    50 caa gga ttt aag gag cct aat ata cag acg tat ctc tcc ggc tgt cca
                                                                              240
    51 Gln Gly Phe Lys Glu Pro Asn Ile Gln Thr Tyr Leu Ser Gly Cys Pro
                                                75
                            70
    54 ata aaa gca caa gtt ctg gaa gtg gaa cgc ttc aca tct aca aca agg
                                                                              288
    55 Ile Lys Ala Gln Val Leu Glu Val Glu Arg Phe Thr Ser Thr Thr Arg
    56
                        85
                                            90
    58 gta cca agt att aat ctt tac act att gaa tta aca cat ggg gaa ttt
                                                                              336
    59 Val Pro Ser Ile Asn Leu Tyr Thr Ile Glu Leu Thr His Gly Glu Phe
                    100
                                        105
    62 aaa tgg caa gtt aag agg aaa ttc aag cat ttt caa gaa ttt cac aga
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    63 Lys Trp Gln Val Lys Arq Lys Phe Lys His Phe Gln Glu Phe His Arg
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Input Set : A:\PTO.AMC.txt

64 115 120 125	
66 gag ctg ctc aag tac aaa gcc ttt atc cgc atc ccc att ccc act aga	432
67 Glu Leu Leu Lys Tyr Lys Ala Phe Ile Arg Ile Pro Ile Pro Thr Arg	
68 130 135 140	
70 aga cac acg ttt agg agg caa aac gtc aga gag gag cct cga gag atg	480
71 Arg His Thr Phe Arg Arg Gln Asn Val Arg Glu Glu Pro Arg Glu Met	
72 145 150 155 160	
74 ccc agt ttg ccc cgt tca tct gaa aac atg ata aga gaa gaa caa ttc	528
75 Pro Ser Leu Pro Arg Ser Ser Glu Asn Met Ile Arg Glu Glu Gln Phe 76 165 170 175	
76 165 170 175 78 ctt ggt aga aga aaa caa ctg gaa gat tac ttg aca aag ata cta aaa	576
79 Leu Gly Arg Arg Lys Gln Leu Glu Asp Tyr Leu Thr Lys Ile Leu Lys	370
80 180 185 190	
82 atg ccc atg tat aga aac tat cat gcc aca aca gag ttt ctt gat ata	624
83 Met Pro Met Tyr Arg Asn Tyr His Ala Thr Thr Glu Phe Leu Asp Ile	
84 195 200 205	
86 agc cag ctg tct ttc atc cat gat ttg gga cca aag ggc ata gaa ggt	672
87 Ser Gln Leu Ser Phe Ile His Asp Leu Gly Pro Lys Gly Ile Glu Gly	
88 210 215 220	
90 atg ata atg aaa aga tot gga gga cac aga ata cca ggo ttg aat tgo	720
91 Met Ile Met Lys Arg Ser Gly Gly His Arg Ile Pro Gly Leu Asn Cys	
92 225 230 235 240	
94 tgt ggt cag gga aga gcc tgc tac aga tgg tca aaa aga tgg tta ata	768
95 Cys Gly Gln Gly Arg Ala Cys Tyr Arg Trp Ser Lys Arg Trp Leu Ile	
96 245 250 255	016
98 gtg aaa gat tcc ttt tta ttg tat atg aaa cca gac agc ggt gcc att 99 Val Lys Asp Ser Phe Leu Leu Tyr Met Lys Pro Asp Ser Gly Ala Ile	816
100 260 265 270	
102 gcc ttc gtc ctg ctg gta gac aaa gaa ttc aaa att aag gtg ggg aag	864
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104 275 280 285	
106 aag gag aca gaa acg aaa tat gga atc cga att gat aat ctt tca agg	912
107 Lys Glu Thr Glu Thr Lys Tyr Gly Ile Arg Ile Asp Asn Leu Ser Arg	
108 290 295 300	
110 aca ctt att tta aaa tgc aac agc tat aga cat gct cgg tgg tgg gga	960
111 Thr Leu Ile Leu Lys Cys Asn Ser Tyr Arg His Ala Arg Trp Trp Gly	
112 305 310 315 320	
114 ggg gct ata gaa gaa ttc atc cag aaa cat ggc acc aac ttt ctc aaa	1008
115 Gly Ala Ile Glu Glu Phe Ile Gln Lys His Gly Thr Asn Phe Leu Lys	
116 325 330 335	1056
118 gat cat cga ttt ggg tca tat gct gct atc caa gag aat gct tta gct	1056
119 Asp His Arg Phe Gly Ser Tyr Ala Ala Ile Gln Glu Asn Ala Leu Ala 120 340 345 350	
120 340 345 350 122 aaa tgg tat gtt aat gcc aaa gga tat ttt gaa gat gtg gca aat gca	1104
123 Lys Trp Tyr Val Asn Ala Lys Gly Tyr Phe Glu Asp Val Ala Asn Ala	1104
123 bys 11p 1yr var Ash Ara bys Gry 1yr Fhe Gru Asp var Ara Ash Ara 124 355 360 365	
126 atg gaa gag gca aat gaa gag att ttt atc aca gac tgg tgg ctg agt	1152
127 Met Glu Glu Ala Asn Glu Glu Ile Phe Ile Thr Asp Trp Trp Leu Ser	1102
128 370 375 380	

Input Set : A:\PTO.AMC.txt

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							_		_		Gln						
136		<u>F</u>	-1-		405	-1-	5	-1-		410		1		5	415		
	2+2	ata	ata	+ 2.0		~~~	ata	~~~	ata		ctt	~~~	ata	t		~~~	1296
																	1290
	ire	Met	ьeu	_	ьўѕ	Gru	vai	GIU		AIA	Leu	GIY	тте		ser	GIU	
140				420					425					430			
											CCC						1344
	Tyr	Thr		Arg	Thr	Leu	Met		Leu	His	Pro	Asn		Lys	Val	Met	
144			435					440					445				
146	aga	cac	ccg	gat	cat	gtg	tca	tcc	acc	gtc	tat	ttg	tgg	gct	cac	cat	1392
147	Arg	His	Pro	Asp	His	Val	Ser	Ser	Thr	Val	Tyr	Leu	Trp	Ala	His	His	
148		450					455					460					
150	gag	aag	ctt	gtc	atc	att	gac	caa	tcq	qtq	gcc	ttt	qtq	qqa	qqq	att	1440
											Āla						
	465	•				470	-				475		-	- 1	- 1	480	
		cta	acc	tat	aga		taa	gac	gac	aat	gag	cac	aga	ctc	aca		1488
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	ASP	пец	ΑΙα	TAT	_	Arg	пр	Asp	Asp		GIU	птъ	Arg	neu		Asp	
156					485					490					495		
											ccg		_				1536
	Val	GLY	Ser		Lys	Arg	Val	Thr		Gly	Pro	Ser	Leu	_	Ser	Leu	
160				500					505					510			
											tta						1584
163	Pro	Pro	Ala	Ala	Met	Glu	Ser	Met	Glu	Ser	Leu	Arg	Leu	Lys	Asp	Lys	
164			515					520					525				
166	aat	gag	cct	gtt	caa	aac	cta	ccc	atc	cag	aag	agt	att	gat	gat	gtg	1632
167	Asn	Glu	Pro	Val	Gln	Asn	Leu	Pro	Ile	Gln	Lys	Ser	Ile	Asp	Asp	Val	
168		530					535				-	540		-	-		
	gat		aaa	cta	aaa	gga		gga	aaσ	cca	aga		ttc	tcc	aaa	ttt	1680
	_			_					_		Arg	_					
	545	501	_,_	200	, S	550		O _T	1 175	110	555	2,5	1110	UCI	_,	560	
		ata	+ > 0	224	a2a		a20	200	a 2 a	a2a	ctg	a aa	a2a	~~~	ant.		1728
																	1/28
	ser	ьeu	TYL	гуѕ		Leu	HIS	Arg	HIS		Leu	HIS	Asp	Ala	_	ser	
176					565					570					575		
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	Ile	Ser	Ser		Asp	Ser	Thr	Ser		Tyr	Phe	Asn	His	_	Arg	Ser	
180				580					585					590			
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183	His	His	Asn	Leu	Ile	His	Gly	Leu	Lys	Pro	His	Phe	Lys	Leu	Phe	His	
184			595					600					605				
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											Arg						
188		610			~ ~ -		615	1			5	620					
	aaa		ato	cat	act	++=		202	aa+	ata	gga		cta	as+	~~~	~ ~ ~	1920
																	1920
		Ser	тте	Arg	ser.		GIII	TIII.	GTÀ	val	Gly	GIU	ьeu	пış	θīΆ		
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Input Set : A:\PTO.AMC.txt

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198 tgg gtt caa ctt gat aaa cct ttt gct gat ttc att gac agg tac tcc 199 Trp Val Gln Leu Asp Lys Pro Phe Ala Asp Phe Ile Asp Arg Tyr Ser	
199 Trp Val Gln Leu Asp Lys Pro Phe Ala Asp Phe Ile Asp Arg Tyr Ser	2016
200 660 665 670	
202 acg ccc cgg atg ccc tgg cat gac att gcc tct gca gtc cac ggg aag	
203 Thr Pro Arg Met Pro Trp His Asp Ile Ala Ser Ala Val His Gly Lys	
204 675 680 685	
206 gcg gct cgt gat gtg gca cgt cac ttc atc cag cgc tgg aac ttc aca	2112
207 Ala Ala Arg Asp Val Ala Arg His Phe Ile Gln Arg Trp Asn Phe Thr	
208 690 695 700	
210 aaa att atg aaa tca aaa tat cgg tcc ctt tct tat cct ttt ctg ctt	2160
211 Lys Ile Met Lys Ser Lys Tyr Arg Ser Leu Ser Tyr Pro Phe Leu Leu	
212 705 710 715 720	
214 cca aag tet caa aca aca gee cat gag ttg aga tat caa gtg eet ggg	
215 Pro Lys Ser Gln Thr Thr Ala His Glu Leu Arg Tyr Gln Val Pro Gly	
216 725 730 735	
218 tet gte cat get aac gta cag ttg ete ege tet get get tgg tet	2256
219 Ser Val His Ala Asn Val Gln Leu Leu Arg Ser Ala Ala Asp Trp Ser	
220 740 745 750	
222 get ggt ata aag tac cat gaa gag tee ate cac gee get tac gte cat	2304
223 Ala Gly Ile Lys Tyr His Glu Glu Ser Ile His Ala Ala Tyr Val His	
224 755 760 765	
226 gtg ata gag aac agc agg cac tat atc tat atc gaa aac cag ttt tto	2352
227 Val Ile Glu Asn Ser Arg His Tyr Ile Tyr Ile Glu Asn Gln Phe Phe	
228 770 775 780	
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230 ata agc tgt gct gat gac aaa gtt gtg ttc aac aag ata ggc gat gcc	
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230 ata agc tgt gct gat gac aaa gtt gtg ttc aac aag ata ggc gat gcc 231 Ile Ser Cys Ala Asp Asp Lys Val Val Phe Asn Lys Ile Gly Asp Ala 232 785 790 795 800 234 att gcc cag agg atc ctg aaa gct cac agg gaa aac cag aaa tac cg	2448
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230 ata agc tgt gct gat gac aaa gtt gtg ttc aac aag ata ggc gat gcc 231 Ile Ser Cys Ala Asp Asp Lys Val Val Phe Asn Lys Ile Gly Asp Ala 232 785 790 795 800 234 att gcc cag agg atc ctg aaa gct cac agg gaa aac cag aaa tac cgg 235 Ile Ala Gln Arg Ile Leu Lys Ala His Arg Glu Asn Gln Lys Tyr Arg 236 805 810 815 238 gta tat gtc gtg ata cca ctt ctg cca ggg ttc gaa gga gac att tca 239 Val Tyr Val Val Ile Pro Leu Leu Pro Gly Phe Glu Gly Asp Ile Ser	2448 2496
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230 ata agc tgt gct gat gac aaa gtt gtg ttc aac aag ata ggc gat gcc 231 Ile Ser Cys Ala Asp Asp Lys Val Val Phe Asn Lys Ile Gly Asp Ala 232 785 790 795 800 234 att gcc cag agg atc ctg aaa gct cac agg gaa aac cag aaa tac cgg 235 Ile Ala Gln Arg Ile Leu Lys Ala His Arg Glu Asn Gln Lys Tyr Arg 236 805 810 815 238 gta tat gtc gtg ata cca ctt ctg cca ggg ttc gaa gga gac att tca 239 Val Tyr Val Val Ile Pro Leu Leu Pro Gly Phe Glu Gly Asp Ile Ser	2448 2496
230 ata agc tgt gct gat gac aaa gtt gtg ttc aac aag ata ggc gat gcc 231 Ile Ser Cys Ala Asp Asp Lys Val Val Phe Asn Lys Ile Gly Asp Ala 232 785	2448 2496 2544
230 ata agc tgt gct gat gac aaa gtt gtg ttc aac aag ata ggc gat gcc 231 Ile Ser Cys Ala Asp Asp Lys Val Val Phe Asn Lys Ile Gly Asp Ala 232 785 790 795 800 234 att gcc cag agg atc ctg aaa gct cac agg gaa aac cag aaa tac cgg 235 Ile Ala Gln Arg Ile Leu Lys Ala His Arg Glu Asn Gln Lys Tyr Arg 236 805 810 815 238 gta tat gtc gtg ata cca ctt ctg cca ggg ttc gaa gga gac att tca 239 Val Tyr Val Val Ile Pro Leu Leu Pro Gly Phe Glu Gly Asp Ile Ser 240 820 825 830 242 acc ggc gga gga aat gct cta cag gca atc atg cac ttc aac tac agg	2448 2496 2544
230 ata agc tgt gct gat gac aaa gtt gtg ttc aac aag ata ggc gat gcc 231 Ile Ser Cys Ala Asp Asp Lys Val Val Phe Asn Lys Ile Gly Asp Ala 232 785	2448 2496 2544
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230 ata agc tgt gct gat gac aaa gtt gtg ttc aac aag ata ggc gat gcc 231 Ile Ser Cys Ala Asp Asp Lys Val Val Phe Asn Lys Ile Gly Asp Ala 232 785 790 795 800 234 att gcc cag agg atc ctg aaa gct cac agg gaa aac cag aaa tac cgg 235 Ile Ala Gln Arg Ile Leu Lys Ala His Arg Glu Asn Gln Lys Tyr Arg 236 805 810 815 815 238 gta tat gtc gtg ata cca ctt ctg cca ggg ttc gaa gga gac att tca 239 Val Tyr Val Val Ile Pro Leu Leu Pro Gly Phe Glu Gly Asp Ile Ser 240 820 825 825 830 830 242 acc ggc gga gga aat gct cta cag gca atc atg cac ttc aac tac agg 243 Thr Gly Gly Gly Asn Ala Leu Gln Ala Ile Met His Phe Asn Tyr Arg 244 835 840 845 246 acc atg tgc aga gga gaa aat tcc atc ctt gga cag tta aaa gca gag 247 Thr Met Cys Arg Gly Glu Asn Ser Ile Leu Gly Gln Leu Lys Ala Gly Chr Cys Arg Gly Glu Asn Ser Ile Leu Gly Gln Leu Lys Ala Gly Cys Arg Gly Glu Asn Ser Ile Leu Gly Gln Leu Lys Ala Gly Cys Arg Gly Glu Asn Ser Ile Leu Gly Gln Leu Lys Ala Gly Cys Arg Gly Glu Asn Ser Ile Leu Gly Gln Leu Lys Ala Gly Cys Arg Gly Glu Asn Ser Ile Leu Gly Gln Leu Lys Ala Gly Cys Arg Gly Glu Asn Ser Ile Leu Gly Gln Leu Lys Ala Gly Cys Arg Gly Gly Gly Asn Ser Ile Leu Gly Gln Leu Lys Ala Gly Cys Arg Gly Gly Gly Asn Ser Ile Leu Gly Gln Leu Lys Ala Gly Cys Arg Gly Gly Gly Asn Ser Ile Leu Gly Gln Leu Lys Ala Gly Cys Arg Gly Gly Asn Ser Ile Leu Gly Gln Leu Lys Ala Gly Cys Arg Gly Gly Asn Ser Ile Leu Gly Gly Gln Leu Lys Ala Gly Cys Arg Gly Gly Asn Ser Ile Leu Gly Gly Gln Leu Lys Ala Gly Cys Arg Gly Gly Asn Ser Ile Leu Gly Gly Gln Leu Lys Ala Gly Cys Arg Gly Gly Asn Ser Ile Leu Gly Gly Gln Leu Lys Ala Gly Cys Arg Gly Gly Asn Ser Ile Leu Gly Gly Gln Leu Lys Ala Gly Cys Arg Gly Gly Asn Ser Ile Leu Gly Gly Gly Gly Asn Gly Gly Asn Gly Cys Arg Gly Gly Asn Ser Ile Leu Gly Gly Gly Gly Asn Gly Cys Arg Gly Gly Asn Ser Ile Leu Gly Gly Gly Gly Asn Gly Gly Asn Gly Cys Arg Gly Gly Asn Gly Cy	2448 2496 2544 2592
230 ata agc tgt gct gat gac aaa gtt gtg ttc aac aag ata ggc gat gcc 231 Ile Ser Cys Ala Asp Asp Lys Val Val Phe Asn Lys Ile Gly Asp Ala 232 785	2448 2496 2544 2592
230 ata agc tgt gct gat gac aaa gtt gtg ttc aac aag ata ggc gat gcc 231 Ile Ser Cys Ala Asp Asp Lys Val Val Phe Asn Lys Ile Gly Asp Ala 232 785 790 795 800 234 att gcc cag agg atc ctg aaa gct cac agg gaa aac cag aaa tac cgg 235 Ile Ala Gln Arg Ile Leu Lys Ala His Arg Glu Asn Gln Lys Tyr Arg 236 805 810 815 238 gta tat gtc gtg ata cca ctt ctg cca ggg ttc gaa gga gac att tca 239 Val Tyr Val Val Ile Pro Leu Leu Pro Gly Phe Glu Gly Asp Ile Ser 240 820 825 830 825 830 242 acc ggc gga gga aat gct cta cag gca atc atg cac ttc aac tac aga 243 Thr Gly Gly Gly Asn Ala Leu Gln Ala Ile Met His Phe Asn Tyr Arg 244 835 840 845 246 acc atg tgc aga gga gaa aat tcc atc ctt gga cag tta aaa gca gaa 247 Thr Met Cys Arg Gly Glu Asn Ser Ile Leu Gly Gln Leu Lys Ala Glu 248 850 855 855 860 250 ctt ggt aat cag tgg ata aat tac ata tac ata tca ttc tgt ggt ctt aga acc 250 ctt ggt aat cag tgg ata aat tac ata tac ata tca ttc tgt ggt ctt aga acc 250 ctt ggt aat cag tgg ata aat tac ata tca ttc tgt ggt ctt aga acc 250 ctt ggt aat cag tgg ata aat tac ata tca ttc tgt ggt ctt aga acc 250 ctt ggt aat cag tgg ata aat tac ata tca ttc tgt ggt ctt aga acc 250 ctt ggt aat cag tgg ata aat tac ata tca ttc tgt ggt ctt aga acc 250 ctt ggt aat cag tgg ata aat tac ata tca ttc tgt ggt ctt aga acc 250 ctt ggt aat cag tgg ata aat tac ata tca ttc tgt ggt ctt aga acc 250 ctt ggt aat cag tgg ata aat tac ata tac ata tca ttc tgt ggt ctt aga acc 250 ctt ggt aat cag tgg ata aat tac ata tac ata tca ttc tgt ggt ctt aga acc 250 ctt ggt aat cag tgg ata aat tac ata tac ata tca ttc tgt ggt ctt aga acc 250 ctt ggt aat cag tgg ata aat tac ata tac ata tca ttc tgt ggt ctt aga acc 250 ctt ggt aat cag tgg ata aat tac ata tac ata tca ttc tgt ggt ctt aga acc 250 ctt ggt aat cag tgg ata ata aat tac ata tca ttc ttg ggt ctt aga acc 250 ctt ggt aat cag tgg ata aat tac ata tca ttc ttg ggt ctt aga acc 250 ctt ggt aat cac ata tca tca tca tca tca tca tc	2448 2496 2544 2592 2640
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230 ata agc tgt gct gat gac aaa gtt gtg ttc aac aag ata ggc gat gcc 231 Ile Ser Cys Ala Asp Asp Lys Val Val Phe Asn Lys Ile Gly Asp Ala 232 785	2448 2496 2544 2592 2640
230 ata agc tgt gct gat gac aaa gtt gtg ttc aac aag ata ggc gat gcc 231 Ile Ser Cys Ala Asp Asp Lys Val Val Phe Asn Lys Ile Gly Asp Ala 232 785	2448 2496 2544 2592 2640
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Input Set : A:\PTO.AMC.txt

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264 915 920 925	
266 gtc att gtg caa gat aca gag act gtt cct tca gta atg gat gga	aaa 2832
267 Val Ile Val Gln Asp Thr Glu Thr Val Pro Ser Val Met Asp Gly	
268 930 935 940	•
270 gag tac caa gct ggc cgg ttt gcc cga gga ctt cgg cta cag tgc	ttt 2880
271 Glu Tyr Gln Ala Gly Arg Phe Ala Arg Gly Leu Arg Leu Gln Cys	
272 945 950 955	960
274 agg gtt gtc ctt ggc tat ctt gat gac cca agt gag gac att cag	gat 2928
275 Arg Val Val Leu Gly Tyr Leu Asp Asp Pro Ser Glu Asp Ile Gln	
276 965 970 975	_
278 cca gtg agt gac aaa ttc ttc aag gag gtg tgg gtt tca aca gca	gct 2976
279 Pro Val Ser Asp Lys Phe Phe Lys Glu Val Trp Val Ser Thr Ala	
280 980 985 990	
282 cga aat gct aca att tat gac aag gtt ttc cgg tgc ctt ccc aa	t gat 3024
283 Arg Asn Ala Thr Ile Tyr Asp Lys Val Phe Arg Cys Leu Pro As	n Asp
284 995 1000 1005	
286 gaa gta cac aat tta att cag ctg aga gac ttt ata aac aag c	cc 3069
287 Glu Val His Asn Leu Ile Gln Leu Arg Asp Phe Ile Asn Lys P	ro
288 1010 1015 1020	
290 gta tta gct aag gaa gat ccc att cga gct gag gag gaa ctg a	ag 3114
291 Val Leu Ala Lys Glu Asp Pro Ile Arg Ala Glu Glu Leu L	ys
292 1025 1030 1035	
294 aag atc cgt gga ttt ttg gtg caa ttc ccc ttt tat ttc ttg t	ct 3159
295 Lys Ile Arg Gly Phe Leu Val Gln Phe Pro Phe Tyr Phe Leu S	er
296 1040 1045 1050	
298 gaa gaa agc cta ctg cct tct gtt ggg acc aaa gag gcc ata g	-
299 Glu Glu Ser Leu Leu Pro Ser Val Gly Thr Lys Glu Ala Ile V	al
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319 20 25 30	7 an
322 Leu His Phe Glu Glu Glu Glu Val Asp Tyr Asp Val Ser Pro Ser	Asp
323 35 40 45	Thr
326 Pro Lys Ile Gln Glu Val Tyr Ile Pro Phe Ser Ala Ile Tyr Asn	TIIT
327 50 55 60	
- 110 CIN CIN DNA INC CIN DYA ACH IIA CIN THA THA TAN CAS CIST CSA	Pro
330 Gln Gly Phe Lys Glu Pro Asn Ile Gln Thr Tyr Leu Ser Gly Cys 331 65 70 75	Pro 80

VERIFICATION SUMMARYDATE: 05/30/2006PATENT APPLICATION: US/10/579,662TIME: 16:07:43

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\05302006\J579662.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

Raw Sequence Listing before editing (for reference only)



IFWP

RAW SEQUENCE LISTING DATE: 05/26/2006
PATENT APPLICATION: US/10/579,662 TIME: 08:27:02

Input Set : A:\133-PCT1-US1.ST25.txt
Output Set: N:\CRF4\05262006\J579662.raw

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59 Val Pro Ser Ile Asn Leu Tyr Thr Ile Glu Leu Thr His Gly Glu Phe

62 aaa tgg caa gtt aag agg aaa ttc aag cat ttt caa gaa ttt cac aga

105

384

63 64	Lys	Trp	Gln 115	Val	Lys	Arg	Lys	Phe 120	Lys	His	Phe	Gln	Glu 125	Phe	His	Arg	
66	σaσ	cta	ctc	aag	tac	aaa	acc	ttt	atc	cac	atc	CCC	att	CCC	act	aga	432
		_		_			_		Ile	_						_	
	OLU		Leu	цуз	TYL	цуs		FIIC	110	лгу	116		116	FIO	1111	Arg	
68		130					135					140					
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71	Arg	His	Thr	Phe	Arg	Arg	Gln	Asn	Val	Arg	Glu	Glu	Pro	Arg	Glu	Met	
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87	Ser	Gln	Leu	Ser	Phe	Ile	His	Asp	Leu	Gly	Pro	Lys	Gly	Ile	Glu	Gly	
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		TIE	Mec	цуъ	Arg		Gry	GIY	His	Arg		PIO	GLY	ьeu	ASII	_	
	225					230					235					240	
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95	Cys	Gly	Gln	Gly	Arg	Ala	Cys	Tyr	Arg	Trp	Ser	Lys	Arg	Trp	Leu	Ile	
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			_				_		Met			_	_		_		010
100		цуз	r.sp	260		псα	пси	ı yı		-	LIO	тэр	DCI	_		110	
									265					270			
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103	Ala	ι Ph∈	e Val	Leu	Leu	Val	. Asp	Lys	s Glu	Phe	Lys	s Ile	e Lys	: Val	. Gly	Lys	
104			275	5				280)				285	;			
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		His	Arc		_	Ser	Tyr	Ala			Glr	ı GLı	ı Asr			Ala	
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		. ~				~	~~-										1150
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132 385																		1200
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135 Leu Asp Cys 1e Leu Lys Arg Lys A			~ ~ ~	+ ~ ~	a++	att		993	222	aa2	a aa		~~~	ata	200	2 t a		1240
136		_	_	_				_		_				-				1240
138		цец	ASP	Cys	116		пур	Arg	цуѕ	на		GIII	GIY	vai	Arg		FILE	
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146 aga cac ccg gat cat gtg tca tcc acc gtc tat ttg tgg gct cac cat cat		ı yı	1111	_	Arg	1111	шец	MEC	_	neu	IIIS	FIO	Poll		пуs	vaı	Mec	
147 Arg His Pro Asp His Val Ser Ser Thr Val Tyr Leu Trp Ala His His His Asp Asp asg and ctt gtc atc att gac caa tcg gtg gcc ttt gtg gga ggg att		202	C2C		cat	ast	ata	tas		300	ata	tat	tta		aat	C2C	cat	1202
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179 Ile Ser Ser Ile Asp Ser Thr Ser Ser Tyr Phe Asn His Tyr Arg Ser 580	176					565					570					575		
180 580 585 590 182 cat cac aat tta atc cat ggt tta aaa ccc cac ttc aaa ctc ttt cac 1824 183 His His Asn Leu Ile His Gly Leu Lys Pro His Phe Lys Leu Phe His 605 184 595 600 605 186 ccg tcc agt gag tct gag caa gga ctc act aga cct cat gct gat acc 1872 187 Pro Ser Ser Glu Ser Glu Gln Gly Leu Thr Arg Pro His Ala Asp Thr 188 610 615 620 190 ggg tcc atc cgt agt tta cag aca ggt gtg gga gag ctg cat ggg gaa 1920 191 Gly Ser Ile Arg Ser Leu Gln Thr Gly Val Gly Glu Leu His Gly Glu	178	atc	agc	agc	att	gac	agc	acc	tcc	agt	tat	ttt	aat	cac	tat	aga	agt	1776
182 cat cac aat tta atc cat ggt tta aaa ccc cac ttc aaa ctc ttt cac 1824 183 His His Asn Leu Ile His Gly Leu Lys Pro His Lys Leu Phe His 184 595 600 600 605 605 605 605 186 ccg tcc agt gag tct gag cac agt cct act gat acc 1872 187 Pro Ser Ser Glu Ser Glu Glu Gly Leu Thr Arg Pro His Ala Asp Thr 188 610 610 615 620 <td< td=""><td>179</td><td>Ile</td><td>Ser</td><td>Ser</td><td>Ile</td><td>Asp</td><td>Ser</td><td>Thr</td><td>Ser</td><td>Ser</td><td>Tyr</td><td>Phe</td><td>Asn</td><td>His</td><td>Tyr</td><td>Arg</td><td>Ser</td><td></td></td<>	179	Ile	Ser	Ser	Ile	Asp	Ser	Thr	Ser	Ser	Tyr	Phe	Asn	His	Tyr	Arg	Ser	
183 His His Asn Leu Ile His Gly Leu Lys Pro His Phe Lys Leu Phe His 184 595 600 605 186 ccg tcc agt gag tct gag caa gga ctc act aga cct cat gct gat acc 1872 187 Pro Ser Ser Glu Ser Glu Gln Gly Leu Thr Arg Pro His Ala Asp Thr 188 610 615 620 190 ggg tcc atc cgt agt tta cag aca ggt gtg gga gag ctg cat ggg gaa 1920 191 Gly Ser Ile Arg Ser Leu Gln Thr Gly Val Gly Glu Leu His Gly Glu	180				580					585					590			
184 595 600 605 186 ccg tcc agt gag tct gag caa gga ctc act aga cct cat ggt gat acc 1872 187 Pro Ser Ser Glu Ser Glu Gln Gly Leu Thr Arg Pro His Ala Asp Thr 188 610 615 615 620 190 ggg tcc atc cgt agt tta cag aca ggt gtg gga gag ctg cat ggg gaa 1920 191 Gly Ser Ile Arg Ser Leu Gln Thr Gly Val Gly Glu Leu His Gly Glu	182	cat	cac	aat	tta	atc	cat	ggt	tta	aaa	CCC	cac	ttc	aaa	ctc	ttt	cac	1824
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187 Pro Ser Ser Glu Ser Glu Gln Gly Leu Thr Arg Pro His Ala Asp Thr 188 610 615 620 190 ggg tcc atc cgt agt tta cag aca ggt gtg gga gag ctg cat ggg gaa 1920 191 Gly Ser Ile Arg Ser Leu Gln Thr Gly Val Gly Glu Leu His Gly Glu	184			595					600					605				
188 610 615 620 190 ggg tcc atc cgt agt tta cag aca ggt gtg gga gag ctg cat ggg gaa 1920 191 Gly Ser Ile Arg Ser Leu Gln Thr Gly Val Gly Glu Leu His Gly Glu	186	ccg	tcc	agt	gag	tct	gag	caa	gga	ctc	act	aga	cct	cat	gct	gat	acc	1872
190 ggg tcc atc cgt agt tta cag aca ggt gtg gga gag ctg cat ggg gaa 1920 191 Gly Ser Ile Arg Ser Leu Gln Thr Gly Val Gly Glu Leu His Gly Glu	187	Pro	Ser	Ser	Glu	Ser	Glu	Gln	Gly	Leu	Thr	Arg	Pro	His	Ala	Asp	Thr	
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	acc	-					_	-		_			_			_	1968
195	Thr	Arg	Phe	Trp	His	Gly	Lys	Asp	Tyr	Cys	Asn	Phe	Val	Phe	Lys	Asp	
196					645					650					655		
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199	\mathtt{Trp}	Val	Gln	Leu	Asp	Lys	Pro	Phe	Ala	Asp	Phe	Ile	Asp	Arg	Tyr	Ser	
200				660					665					670			
202	acg	CCC	cgg	atg	CCC	tgg	cat	gac	att	gcc	tct	gca	gtc	cac	ggg	aag	2064
203	Thr	Pro	Arg	Met	Pro	Trp	His	Asp	Ile	Ala	Ser	Ala	Val	His	Gly	Lys	
204			675					680					685				
206	gcg	gct	cgt	gat	gtg	gca	cgt	cac	ttc	atc	cag	cgc	tgg	aac	ttc	aca	2112
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208		690					695					700					
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212	705					710					715					720	
214	cca	aag	tct	caa	aca	aca	gcc	cat	gag	ttg	aga	tat	caa	gtg	cct	ggg	2208
215	Pro	Lys	Ser	Gln	Thr	Thr	Ala	His	Glu	Leu	Arg	Tyr	Gln	Val	Pro	Gly	
216					725					730					735		
218	tct	gtc	cat	gct	aac	gta	cag	ttg	ctc	cgc	tct	gct	gct	gat	tgg	tct	2256
219	Ser	Val	His	Ala	Asn	Val	Gln	Leu	Leu	Arg	Ser	Ala	Āla	Asp	Trp	Ser	
220				740					745	_				750	_		
222	gct	ggt	ata	aag	tac	cat	gaa	gag	tcc	atc	cac	qcc	gct	tac	qtc	cat	2304
223	Ala	Gly	Ile	Lys	Tyr	His	Glu	Glu	Ser	Ile	His	Āla	Āla	Tyr	Val	His	
224		_	755	-	_			760					765	-			
226	gtg	ata	gag	aac	agc	agg	cac	tat	atc	tat	atc	qaa	aac	caq	ttt	ttc	2352
	Val					-						_		_			
228		770				_	775	-		-		780					
230	ata	agc	tgt	gct	gat	gac	aaa	gtt	gtg	ttc	aac	aag	ata	ggc	gat	qcc	2400
	Ile	_			_	_		_				_			_	-	
	785		_		_	790	-				795	_		-	_	800	
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	Ile	_	_			_		_			_		_				
236				_	805		-			810				-	815	_	
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	Val																
240		-		820					825	•			-	830			
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	Thr					_					_					_	
244		-	835	•				840					845		•	-	
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	Thr																
248		850	•	_	•		855				•	860		-			
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	Leu																
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	cat	qca	qaq	ctc	qaa		aac	cta	qta	act		ctt	atc	tat	atic		2688
	His																
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259 Ser Lys Leu Leu Ile Ala Asp Asp Asn Thr Val Ile Ile Gly Ser Al 260 900 905 910	a
262 aac ata aat gac cgc agc atg ctg gga aag cgt gac agt gaa atg gc	t 2784
263 Asn Ile Asn Asp Arg Ser Met Leu Gly Lys Arg Asp Ser Glu Met Al	a
264 915 920 925	
266 gtc att gtg caa gat aca gag act gtt cct tca gta atg gat gga aa	
267 Val Ile Val Gln Asp Thr Glu Thr Val Pro Ser Val Met Asp Gly Ly	S
268 930 935 940	- 2000
270 gag tac caa gct ggc cgg ttt gcc cga gga ctt cgg cta cag tgc tt	
271 Glu Tyr Gln Ala Gly Arg Phe Ala Arg Gly Leu Arg Leu Gln Cys Ph 272 945 950 955 96	
274 agg gtt gtc ctt ggc tat ctt gat gac cca agt gag gac att cag ga 275 Arg Val Val Leu Gly Tyr Leu Asp Asp Pro Ser Glu Asp Ile Gln As	
276 965 970 975	Р
278 cca gtg agt gac aaa ttc ttc aag gag gtg tgg gtt tca aca gca gc	t 2976
270 Ced geg age gae dad the the day gag geg tag get ted ded ged ge 279 Pro Val Ser Asp Lys Phe Phe Lys Glu Val Trp Val Ser Thr Ala Al	
280 980 985 990	ű
282 cga aat gct aca att tat gac aag gtt ttc cgg tgc ctt ccc aat	gat 3024
283 Arg Asn Ala Thr Ile Tyr Asp Lys Val Phe Arg Cys Leu Pro Asn	-
284 995 1000 1005	-
286 gaa gta cac aat tta att cag ctg aga gac ttt ata aac aag ccc	3069
287 Glu Val His Asn Leu Ile Gln Leu Arg Asp Phe Ile Asn Lys Pro	
288 1010 1015 1020	
290 gta tta gct aag gaa gat ccc att cga gct gag gag gaa ctg aag	3114
291 Val Leu Ala Lys Glu Asp Pro Ile Arg Ala Glu Glu Leu Lys	
292 1025 1030 1035	
294 aag atc cgt gga ttt ttg gtg caa ttc ccc ttt tat ttc ttg tct	3159
295 Lys Ile Arg Gly Phe Leu Val Gln Phe Pro Phe Tyr Phe Leu Ser	
296 1040 1045 1050	
298 gaa gaa agc cta ctg cct tct gtt ggg acc aaa gag gcc ata gtg	
299 Glu Glu Ser Leu Leu Pro Ser Val Gly Thr Lys Glu Ala Ile Val	
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319 20 25 30	
322 Leu His Phe Glu Gly Glu Glu Val Asp Tyr Asp Val Ser Pro Ser As	р
323 35 40 45	
326 Pro Lys Ile Gln Glu Val Tyr Ile Pro Phe Ser Ala Ile Tyr Asn Th	r
327 50 55 60	
330 Gln Gly Phe Lys Glu Pro Asn Ile Gln Thr Tyr Leu Ser Gly Cys Pr	0

VERIFICATION SUMMARYDATE: 05/26/2006PATENT APPLICATION: US/10/579,662TIME: 08:27:03

Input Set : A:\133-PCT1-US1.ST25.txt
Output Set: N:\CRF4\05262006\J579662.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number

L:11 M:283 W: Missing Blank Line separator, <140> field identifier

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date